

WHAT IS CLAIMED IS:

Sub B3

1. A method for supplying items to a plurality of dispensing units, the method comprising:

- providing a plurality of dispensing units that each hold a plurality of at least one type of item, wherein the units have a processor and a memory for storing a record of inventory levels of each item;
- periodically sending restocking information from the dispensing units over a network to a server computer, wherein the restocking information includes a restock quantity for each item;
- generating ordering information for the items to be restocked based on the restocking information;
- electronically sending the ordering information to one or more supplier computers to order items to be restocked into the dispensing units.

2. A method as in claim 1, further comprising polling the dispensing units over the network using the server computer to obtain the quantities of the items to be restocked.

3. A method as in claim 1, further comprising generating the ordering information using the server computer, and wherein the ordering information generating step further comprises determining supplier information for the items to be ordered.

4. A method as in claim 3, electronically sending the ordering information from the server computer to an application computer having a hosted procurement application.

5. A method as in claim 4, accessing the hosted procurement application to view the ordering information on a display screen of a user computer, and further comprising producing one or more pages on the display screen of the user computer to permit the ordering information to be approved, modified or canceled.

6. A method as in claim 5, further comprising sending the ordering information from the application computer to an electronic requisition and purchasing system, and further comprising generating one or more electronic purchase order numbers

4 using the electronic requisition and purchasing system and electronically sending the  
5 purchase order number to the application computer.

1 7. A method as in claim 6, further comprising electronically sending  
2 the purchase order number and the supplier information from the application computer to  
3 a business portal computer, and electronically sending the purchase order number from  
4 the business portal computer to the supplier computer based on the supplier information.

1 8. A method as in claim 7, further comprising electronically sending  
2 an advanced shipping notice from the supplier computer, to the business portal computer,  
3 to the application computer and to the server computer, wherein the advanced shipping  
4 notice includes information on items to be shipped, their quantities and a date of  
5 shipment.

1 9. A method as in claim 8, further comprising electronically sending  
2 information contained in the advanced shipping notice from the server computer to the  
3 dispensing units to apprise the dispensing units of the items and quantities to be shipped  
4 for restocking into the dispensing units.

1 10. A method as in claim 9, further comprising shipping at least some  
2 of the ordered items to the dispensing units that are contained in the advanced shipping  
3 notice.

1 11. A method as in claim 10, further comprising electronically sending  
2 information contained in the advanced shipping notice from the application computer to  
3 the user computer for items that are not stocked in the dispensing units.

1 12. A method as in claim 10, further comprising restocking the shipped  
2 items into the dispensing units, reconciling the restocked items with the advanced  
3 shipping notice using the dispensing unit processor, and electronically sending a  
4 confirmation receipt to the server computer from the dispensing units.

1 13. A method as in claim 12, further comprising electronically sending  
2 the receipt from the server computer to the supplier computers and to the electronic  
3 requisition and purchasing system.

1                   14.     A method as in claim 13, further comprising generating an  
2 electronic invoice at the supplier computer based on the receipt, and electronically  
3 sending the invoice to the business portal computer and the application computer.

1                   15.     A method as in claim 14, further comprising electronically  
2 transmitting the electronic invoice from the application computer to the electronic  
3 requisition and purchasing system, and generating payment using the electronic  
4 requisition and purchasing system.

1                   16.     A method to facilitate supplying of items into a plurality of  
2 dispensing units, the method comprising:  
3                   receiving at a server computer restocking information from a plurality of  
4 dispensing units, wherein the restocking information includes a restock quantity for items  
5 to be restocked into the dispensing units;  
6                   generating ordering information for the items to be restocked using the  
7 server computer based on the restocking information; and  
8                   electronically sending the ordering information from the server computer  
9 to permit restock items to be ordered.

1                   17.     A method as in claim 16, further comprising receiving at the server  
2 computer an advanced shipping notice generated by a supplier computer, the advanced  
3 shipping notice containing information items to be shipped by a supplier; and transmitting  
4 information from the advanced shipping notice from the server computer to the  
5 dispensing units to apprise the dispensing units of the items and quantities to be shipped  
6 for restocking into the dispensing units.

1                   18.     A method as in claim 17, further comprising restocking the shipped  
2 items into one of the dispensing units, wherein the restocking step comprises placing the  
3 dispensing unit into restocking mode, placing the shipped items into the dispensing unit  
4 and touching item buttons corresponding to the items placed into the dispensing unit to  
5 compare the record of restocked items with the advanced shipping notice, to acknowledge  
6 the quantity restocked is equal to the quantity represented in the advance shipping notice,  
7 and to produce a record of restocked items.

1 19. A method as in claim 17, further comprising restocking the shipped  
2 items into one of the dispensing units, wherein the restocking step comprises placing the  
3 dispensing unit into restocking mode, identifying the items to the dispensing unit by  
4 scanning bar-codes associated with the items, placing the shipped items into the  
5 dispensing unit and touching item buttons corresponding to the items placed into the  
6 dispensing unit to compare the record of restocked items with the advanced shipping  
7 notice, to acknowledge the quantity restocked is equal to the quantity represented in the  
8 advance shipping notice, and to produce a record of restocked items.

1 20. A method as in claim 17, further comprising receiving at the server  
2 computer a confirmation receipt from the dispensing units of items contained in the  
3 advanced shipping notice that were restocked into the dispensing units.

1 21. A method as in claim 20, further comprising electronically sending  
2 the receipt from the server computer to supplier computers and to an electronic  
3 requisition and purchasing system for payment.

1 22. A method as in claim 17, wherein the ordering information  
2 generating step further comprises determining supplier information for the items to be  
3 ordered using the server computer.

1 23. A method to facilitate supplying of items into a plurality of  
2 dispensing units, the method comprising:  
3 receiving at a server computer restocking information from a plurality of  
4 dispensing units, wherein the restocking information includes a restock quantity for items  
5 to be restocked into the dispensing units;  
6 generating ordering information for the items to be restocked using the  
7 server computer based on the restocking information;  
8 electronically sending the ordering information from the server computer  
9 to an application computer which operates a hosted procurement application to permit the  
10 ordering information to be approved, canceled or modified.

1 24. A method as in claim 23, further comprising polling the dispensing  
2 units over the network using the server computer to obtain the quantities of the items to  
3 be restocked.

1                   25.     A method as in claim 23, wherein the ordering information  
2 generating step further comprises determining supplier information for the items to be  
3 ordered using the server computer.

1                   26.     A method as in claim 23, further comprising accessing the hosted  
2 procurement application over a network using a user computer.

1                   27.     A method as in claim 26, further comprising displaying the  
2 ordering information on a display screen at the user computer, and further comprising  
3 producing one or more pages on the display screen of the user computer to permit the  
4 ordering information to be approved, modified or canceled.

1                   28.     A method as in claim 23, further comprising receiving at the server  
2 computer an advanced shipping notice generated by a supplier computer, and transmitting  
3 information from the advanced shipping notice from the server computer to the  
4 dispensing units to apprise the dispensing units of the items and quantities to be shipped  
5 for restocking into the dispensing units.

1                   29.     A method as in claim 28, further comprising receiving at the server  
2 computer a confirmation receipt from the dispensing units of items contained in the  
3 advanced shipping notice that were restocked into the dispensing units.

1                   30.     A method as in claim 29, further comprising electronically sending  
2 the receipt from the server computer to supplier computers and to an electronic  
3 requisition and purchasing system for payment.

1                   31.     A method for supplying consigned items to a plurality of  
2 dispensing units, the method comprising:  
3                   providing a plurality of dispensing units that each hold a plurality of at  
4 least one type of item on consignment from an external supplier, wherein the units have a  
5 processor and a memory for storing a record of inventory levels of each item;  
6                   periodically sending restocking information from the dispensing units over  
7 a network to a server computer, wherein the restocking information includes a restock  
8 quantity for each item;

SUB  
B4

9 generating ordering information for the items to be restocked based on the  
10 restocking information;  
11 electronically sending the ordering information to one or more supplier  
12 computers to order items to be restocked into the dispensing unit.

1 32. A method for supplying items to a plurality of dispensing units, the  
2 method comprising:

3 providing a plurality of dispensing units that each hold a plurality of at  
4 least one type of item, wherein the units have a processor and a memory for storing a  
record of inventory levels of each item;

6 periodically sending restocking information from the dispensing units over  
7 a network to a server computer, wherein the restocking information includes a restock  
8 quantity for each item;

9 generating an aggregated list of items and their associated quantities that  
10 are to be restocked based on the restocking information;

11 providing a hosted procurement application to permit manual selection of  
12 suppliers, manufacturers, and quantities for the items in the aggregated list;

13 generating ordering information for the items to be restocked based on the  
14 manual selection using the hosted procurement application;

15 electronically sending the ordering information to one or more supplier  
16 computers to order items to be restocked into the dispensing unit.

1 33. A method as in claim 32, further comprising electronically posting  
2 desired items and quantities using the hosted procurement application to permit suppliers  
3 to provide electronic quotes for supplying the supplies.

1 34. A method as in claim 32, further comprising ordering items that are  
2 not on the aggregated list using the hosted procurement application.

1 35. A method as in claim 32, further comprising electronically posting  
2 suppliers, manufactures of items carried by the suppliers and their associated prices using  
3 the hosted procurement application to permit manual selection of the suppliers and  
4 manufacturers.

1 36. A hosted procurement application, comprising:

2 a computer readable medium having ordering information on items and  
3 quantities to be stocked into a plurality of dispensing units, the ordering information  
4 further including suppliers of the items, and code to permit access to the ordering  
5 information over a network to permit the ordering information to be approved, modified,  
6 or canceled over the network, and code to transmit the ordering information to an  
7 electronic accounting system to generate an electronic purchase order.

1 37. A server computer comprising:  
2 a processor;  
3 code to poll a plurality of dispensing units over a network to obtain  
4 restocking information on quantities of items to be restocked into the dispensing units;  
5 code to generate ordering information for items to be restocked;  
6 a database to store the restocking information and the ordering  
7 information.)

1 38. A server computer as in claim 37, further comprising code to send  
2 the restocking information to an application computer for approval or modification of the  
3 ordering information.

1 39. A server computer as in claim 37, further comprising code to  
2 associate suppliers with the items to be ordered.

1 40. A server computer as in claim 37, further comprising code to send  
2 advanced shipping notice received from a supplier computer to the dispensing units to  
3 apprise the dispensing units of the items and quantities to be shipped for restocking into  
4 the dispensing units.

1 41. A server computer as in claim 40, further comprising code to send  
2 an electronic receipt that was received from the dispensing units to supplier computers to  
3 confirm receipt of an order.

1 42. A system for supplying items to a plurality of dispensing units, the  
2 system comprising:  
3 a plurality of dispensing units that each hold a plurality of at least one type  
4 of item, wherein the units have a processor and a memory for storing a record of  
5 inventory levels of each item;

6 a server computer that is connectable to the dispensing units over a  
7 network to permit restocking information to be transmitted from the dispensing units to  
8 the server computer, wherein the restocking information includes a restock quantity for  
9 each item, wherein the server computer further includes code to generate ordering  
10 information for the items to be restocked based on the restocking information, and code to  
11 electronically send the ordering information to one or more supplier computers to order  
12 items to be restocked into the dispensing units.

1 43. A system as in claim 42, wherein the server computer further  
2 includes code to poll the dispensing units over the network to obtain the quantities of the  
3 items to be restocked.

1 44. A system as in claim 42, wherein the server computer further  
2 includes code to generate the ordering information by determining supplier information  
3 for the items to be ordered.

1 45. A system as in claim 42, wherein the server computer includes  
2 code to electronically send the ordering information to an application computer having a  
3 hosted procurement application.

1 46. A system as in claim 45, further comprising a user computer  
2 having a display screen, wherein the user computer is configured to access the hosted  
3 procurement application to view the ordering information on the display screen, and  
4 wherein the hosted procurement application is configured to produce one or more pages  
5 on the display screen of the user computer to permit the ordering information to be  
6 approved, modified or canceled.

1 47. A system as in claim 46, further comprising code to send the  
2 ordering information from the application computer to an electronic requisition and  
3 purchasing system, and wherein the electronic requisition and purchasing system is  
4 configured to generate one or more electronic purchase order numbers and to  
5 electronically send the purchase order number to the application computer.

1 48. A system as in claim 47, wherein the application computer includes  
2 code to electronically send the purchase order number and the supplier information from  
3 the application computer to a business portal computer, and wherein the business portal



4 computer includes code to electronically send the purchase order number to the supplier  
5 computer based on the supplier information.

1 49. A system as in claim 48, wherein the supplier computer includes  
2 code to electronically send an advanced shipping notice to the business portal computer  
3 for transmittance to the server computer, wherein the advanced shipping notice includes  
4 information on items to be shipped, their quantities and a date of shipment.

1 50. A system as in claim 49, wherein the server computer includes  
2 code to electronically send information contained in the advanced shipping notice to the  
3 dispensing units to apprise the dispensing units of the items and quantities to be shipped  
4 for restocking into the dispensing units.

1 51. A system as in claim 50, wherein the application computer includes  
2 code to electronically send information contained in the advanced shipping notice to the  
3 user computer for items that are not stocked in the dispensing units.

1 52. A system as in claim 50, wherein the dispensing units are  
2 configured to reconcile any restocked items with the advanced shipping notice and to  
3 electronically send a confirmation receipt to the server computer.

1 53. A system as in claim 52, wherein the server computer includes  
2 code to electronically send the receipt to the supplier computers and to the electronic  
3 requisition and purchasing system.

1 54. A system as in claim 53, wherein the supplier computers are  
2 configured to generate an electronic invoice based on the receipt, and to electronically  
3 send the invoice to the business portal computer and the application computer.

1 55. A system as in claim 54, wherein the application computer is  
2 configured to electronically transmit the electronic invoice to the electronic requisition  
3 and purchasing system for payment generation.